

# **NSN view on Interoperability**

**Ajit Kahaduwe**

**March 16, 2011**

# Testing within the 3GPP Ecosystem

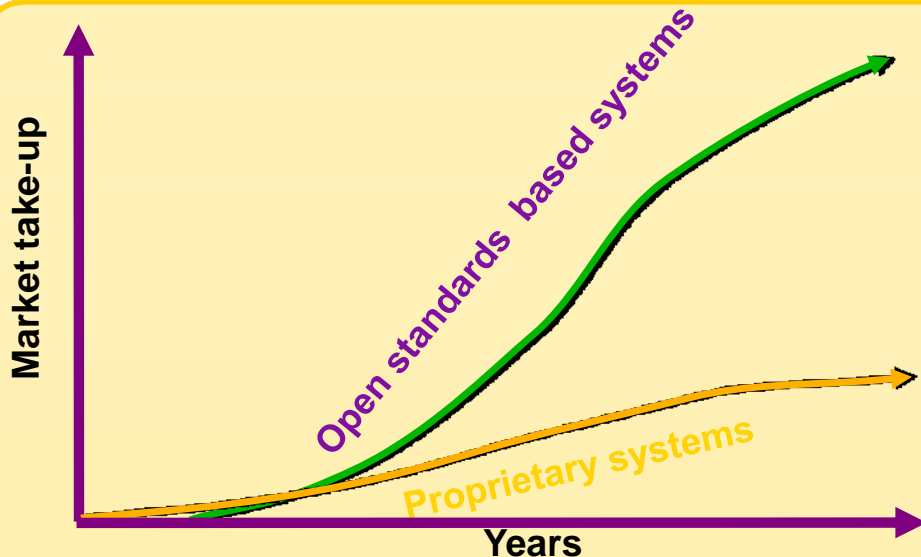
- Multiple industry fora involved in addition to Vendor and Operator testing / trialling
- Each organization has focused on a segment of the testing needs



# Open Standards: Fueling market growth & innovation

Reflects broad market requirements

**Increased customer choice**



**Greater inter-operability**

**Cost reduction due competition**

**3GPP Ecosystem is leading the way for open systems**

# Interoperability Requires Industry Collaboration

## 3GPP's broad membership ensures openness

Interoperability best achieved through broad global open standards over multiple layers

Interfaces

Security

Messaging

Multi-Radio Interworking

Protocols

UE

3GPP Systems Offer

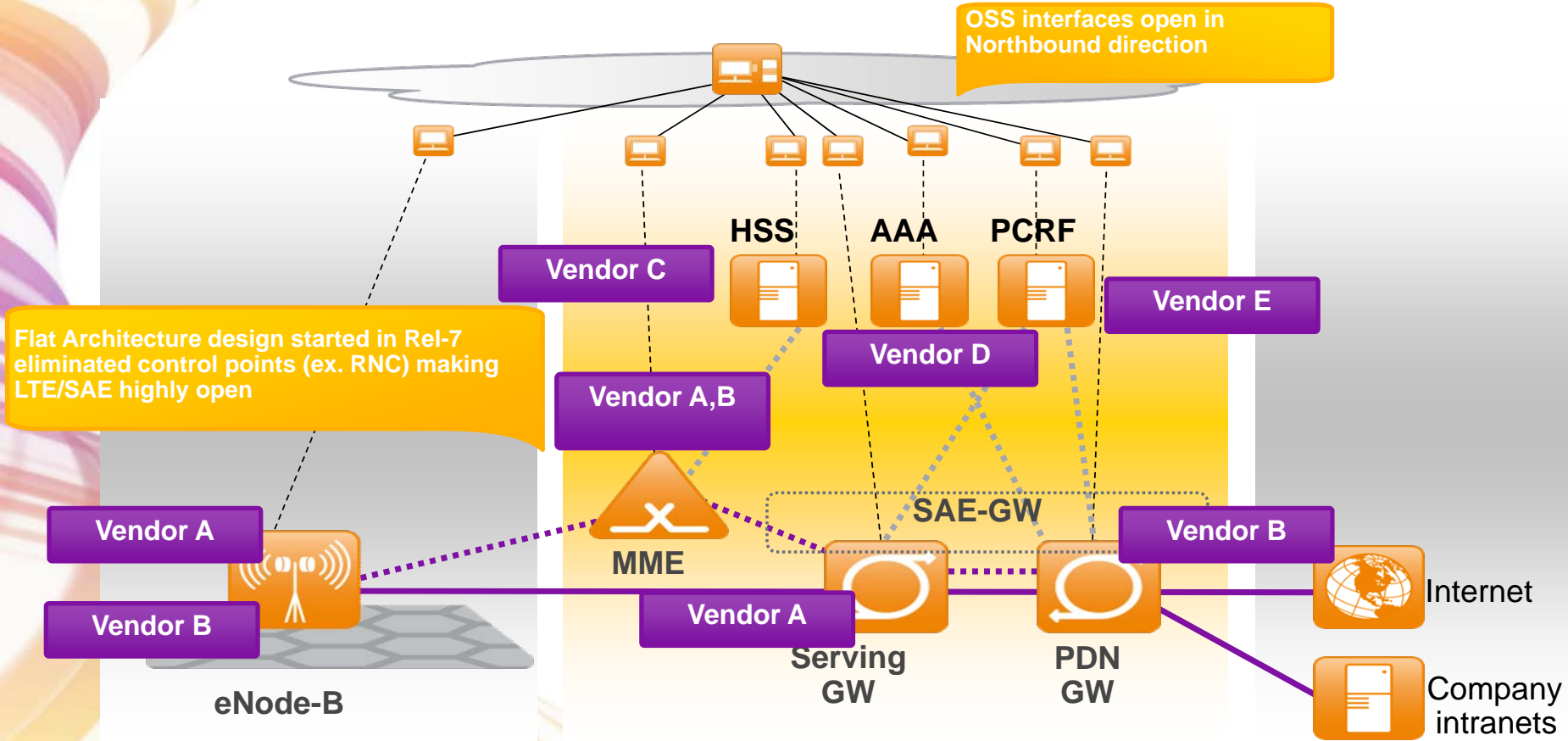


Open interfaces between network elements

Interworking with GSM, WCDMA, LTE, CDMA2000, & WLAN

Open E2E security mechanisms with public inspection of cryptography

# Impact of Open Interfaces on LTE/SAE

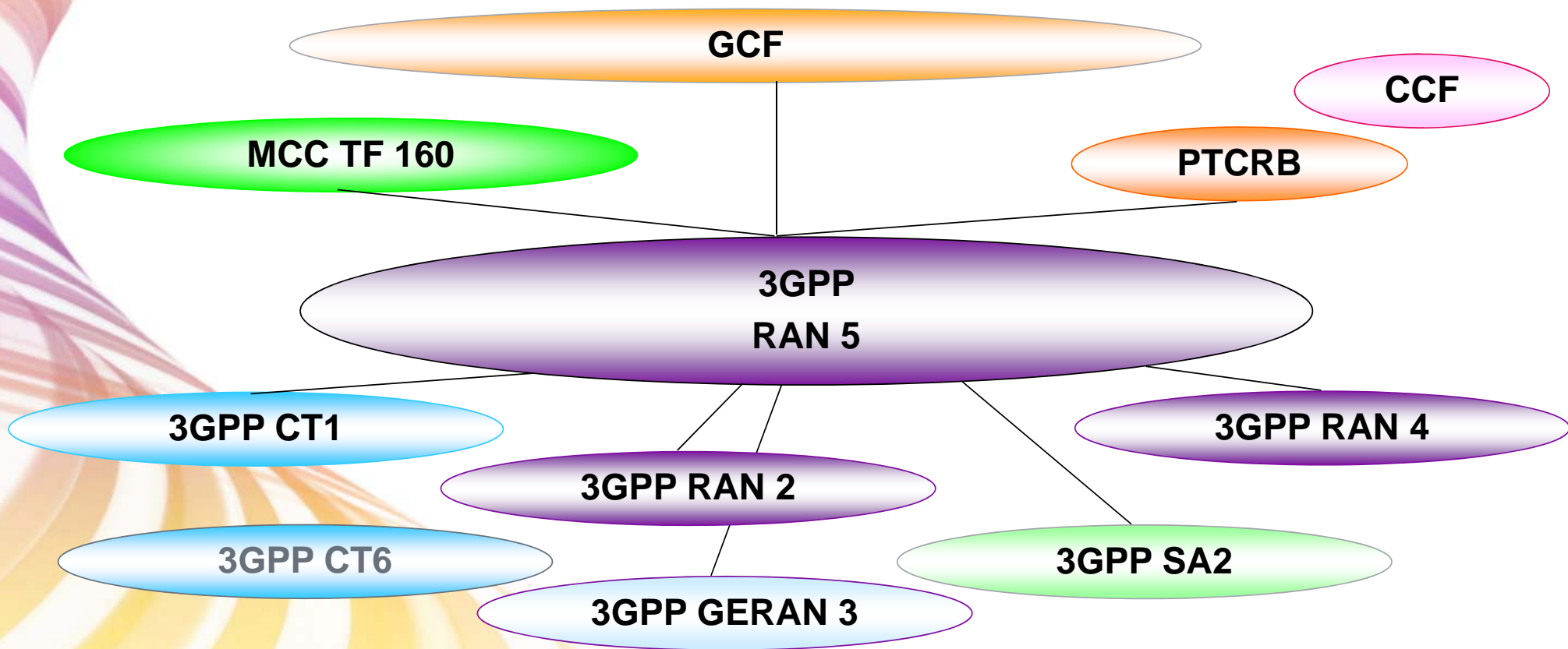


Most Open 3GPP System Standardized to Date

# Terminal IOT



# Groups involved in UE Conformance Testing



# Conclusion

- 3GPP uses an ecosystem approach to ensure interoperability and conformance to standards built from the ground up based on open interfaces
- 3GPP ecosystem global reach and efficiency should be leveraged not compromised
- We need to consider how and where to leverage existing testing bodies and methods to help develop interoperable public safety systems.
- How does public safety interface with existing organizations and input specific needs for testing and interoperability?